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ABSTRACT

The graduation rates of the fall semester freshman classes that entered the Indiana University Bloomington (IU) campus between 1970-1977 (excluding 1973) were examined, and the results of a 1975 survey were extended. In addition, the current analysis examines the graduation rate of each class in relation to student race and sex, and new comparative information from other Big Ten universities is also presented. Attention is directed to the number of matriculants and the cumulative percentages of each freshman class who received any undergraduate degree from the Bloomington campus and the IU system by years since matriculation. The freshman class of 1970 had the highest 4-year, 5-year, and overall graduation rate of all the classes. While the percentage of Bloomington students completing an undergraduate degree declined from a high of 40 percent (for the 1970 freshman class), it appeared to be leveling off at about 35 percent (39 percent for the IU system). The graduation during the fifth year since matriculation increased from a low of 8 percent to a high of 13 percent for the Bloomington campus, and from 10 to 16 percent for the system. In every case the fifth year increases were greater for males. As a group, whites graduated at a higher rate than either black or other minority students. The graduation rate of minority females was generally higher than that of minority males in both the Bloomington and systemwide data. Comparative data from the University of Iowa; University of Illinois, Urbana-Champaign; Michigan State University; and the University of Michigan are reviewed. (SW)

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Bureau of Evaluative Studies and Testing
Indiana University

GRADUATION RATES OF INDIANA UNIVERSITY FRESHMEN

1970-1977

WITH RACE AND SEX INFORMATION

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Bureau of Evaluative Studies and Testing
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GRADUATION RATES OF I.U. FRESHMEN 1970-77
WITH SEX AND RACE INFORMATION

When a student enters an institution of higher education, the presumed goal is to achieve a college degree. The traditional framework of undergraduate education has been a four year program. A recent study, however, by the American Council of Education ("College Report Rate," 1980) found that for a typical group of ten freshmen, only four graduated from the original institution within four years and only one more at a later time after that. In other words, only about fifty (50) percent of the freshmen entering the "typical" institution will graduate from that institution at some point in the future. College attrition is not a new phenomenon; it is a continuing important problem facing higher education.

In the fall of 1975, the Bureau of Evaluative Studies and Testing began a series of studies on the persistence of students who had matriculated on the Bloomington campus of Indiana University (IU). A study by Brigman and Jacobs (1979) focused on the first two years of the undergraduate program of IU. Of the students who entered the Bloomington campus of IU in the fall of 1974, sixty-seven (67) percent were still enrolled in the fall of 1976. Eighteen (18) percent of these students had voluntarily withdrawn and 14 percent had left the University in academic difficulty.

The above study focused on students only during the first two years of their academic career to better understand the persistence/attrition phenomenon and its characteristics. In another study, Brigman and Friedman (1980) examined the rate at which students who began their careers at IU completed the goal of an undergraduate degree. The results of that study indicated a decline in the four year graduation rate and an increase in the percentage of students who received their degree during the fifth year after matriculation. The percentage of students receiving a degree from IU after the fifth year never exceeded a cumulative total of six percent.

The present research report updates this previous report with two additional years of data. A new perspective is provided by analyzing the graduation rate of each class according to the race and sex of the students. Some new comparative data from other Big Ten universities is also presented.

Method

This study examined the graduation rates of the fall semester freshman classes which entered the IU Bloomington campus between 1970-77.[1]

[1] Data for the 1973 freshman class were not available.

For each year, the fall first semester freshmen on the Bloomington campus were identified. In August, 1981, University records were checked to determine if a student had received an undergraduate degree from Indiana University. If the student had completed an undergraduate degree, the date that degree was conferred, the type of degree, the campus in the IU System awarding the degree, and race and sex were recorded. Initial date extraction was performed by the Office of the Registrar - Student Information Section.

Students matriculating during the summer sessions were not included in the sample. Thus, students entering IU under the auspices of the GROUPS Special Services Program with its special admission criteria were not included in the freshman sample. The numbers and percentages of students receiving degrees did not account for the students who transferred out of the IU System and graduated from other universities. Also, students who were not enrolled for a full course load (12+ hours) each semester or who stopped out for one or more semesters during the traditional undergraduate program at IU were not identified separately.

Summaries were prepared for the numbers and percentages of each freshman class who were awarded degrees by Indiana University by the number of years since matriculation on the Bloomington campus. These graduation rates were also summarized by the unit awarding the degree, i.e., the Bloomington campus or any IU System campus.

Student reported biographic information on sex and race provide an additional dimension to this report. Summaries were prepared of males and females for all years; however, accurate racial data were not available prior to 1972. Initial data extraction provided the following ethnic categories: White non-Hispanic, Black Non-Hispanic, Hispanic, Alaskan/American Indian, Asian/Pacific Islander, Undefined Ethnic Group, and Non-Resident Alien. For purposes of analysis, racial groups that numbered less than one percent of the total matriculants were placed in one category. The contribution of individual groups to the category Other is indicated in the Appendix.

Results: Total Class Graduation Rate

Table 1 provides a summary of the number of matriculants and the cumulative percentages of each freshman class who received any undergraduate degree from the Bloomington campus and the IU System by years since matriculation. This table extends information originally presented in Brigman and Friedman (1980, page 9), and will only be summarized below. Approximately 98 percent of all undergraduate degrees awarded by IU Bloomington and 95 percent of those awarded by the IU System were baccalaureate.

The updated information in Table 1 reaffirms the results from the previous study. The freshman class of 1970 had the highest four-year, five-year, and overall graduation rate of all the classes included in the study. This was the only class in which over 40 percent of the

TABLE 1

Cumulative Percentages of Freshmen Receiving Undergraduate Degrees from Indiana University

Beginning Semester/Year	Number of Freshmen	Degree Awarding Unit	Years Since Matriculation								
			3	4	5	6	7	8	9	10	11
Fall 1970	4621	Blmgtn.	3	41	49	51	51	53	53	54	54
		IU System	3	46	56	59	61	62	63	63	63
Fall 1971	4652	Blmgtn.	3	36	46	48	49	50	51	51	
		IU System	3	40	52	55	57	58	59	59	
Fall 1972	4722	Blmgtn.	2	35	46	49	50	50	51		
		IU System	3	41	54	57	59	60	61		
Fall 1974	4676	Blmgtn.	2	34	45	49	50				
		IU System	2	38	52	56	58				
Fall 1975	5227	Blmgtn.	1	34	47	50					
		IU System	2	38	52	56					
Fall 1976	4985	Blmgtn.	2	35	48						
		IU System	2	38	54						
Fall 1977	4990	Blmgtn.	2	36							
		IU System	2	39							
Average	4839	Blmgtn.	2	36	47	49	50	51	52	53	54
		IU System	2	40	53	57	59	60	61	61	63

matriculants graduated from IU Bloomington within four years. Since that time, the four-year Bloomington graduation rate has ranged between 34 and 36 percent. The four year rate from IU Bloomington for the latest class included in this report (freshmen 1977) was 36 percent. Four year graduation rate data from the IU System showed that only in 1970, 1971, and 1972 was the four year rate over 40 percent. For the last four years included in this study this figure ranged between 38 and 39 percent.

While the percentage of matriculants awarded a degree by IU Bloomington in their fifth year since matriculation was 8 percent for the freshman class of 1970, it increased to thirteen percent for the classes of 1975 and 1976. For the system, an additional 14 percent of the matriculants in 1974 and 1975 and 16 percent in 1976 received an undergraduate degree during the fifth year after matriculation. The minimum cumulative five year graduation rate figure for the IU System was 52 percent; for IU Bloomington the five year minimum was 46 percent.

Increase in the graduation rate of each class after the fifth year ranged between 1 and 3 percent per year, but never cumulatively exceeded 5 percent for IU Bloomington or 7 percent for the IU System. On the average, eight years after matriculation 51 percent graduated from IU Bloomington and 60 percent from the IU System.

Results: Graduation Rates by Sex

Table 2 provides a summary of the numbers and cumulative percentages of each freshman class by sex who received any undergraduate degree from the Bloomington campus by the number of years since matriculation. Table 3 provides this information for the IU System.

The highest rate of undergraduate degree attainment for each sex was demonstrated by Fall 1970 matriculants. Over forty (40) percent of both males and females graduated from IU Bloomington within four years. After six years, fifty-five (55) percent of the males had graduated compared to 49 percent of the females. IU System data reversed the relationship between males and females. Over 50 percent of the females as compared to only 43 percent of the males had graduated within four years from the System. From seven years on, over 60 percent of each sex in the freshman class of 1971 had received an undergraduate degree, but the percentage of females was still higher.

This relationship, a higher percentage of males than females graduating from the IU Bloomington campus, was sustained for each freshman class beginning with the fifth year since matriculation. However, this relationship generally reversed itself when the IU System was examined. In every case but one, a higher percentage of females than males were awarded degrees 4, 5, and 6 years after matriculation by the System. This may be due to the number of females in Allied Health programs which requires transfer to the Indianapolis campus. A brief discussion on the other matriculating classes follows.

TABLE 2

UNDERGRADUATE DEGREE ATTAINMENT FROM INDIANA UNIVERSITY'S BLOOMINGTON CAMPUS
FOR FALL FRESHMEN CLASSES OF 1970-1977 BY SEX

SEX	Freshman Class (Number)		Years Since Matriculation									
			2	3	4	5	6	7	8	9	10	11
Males	1970 (N=2194)	Cum. %	-[a]	3	41	51	54	56	57	58	58	58
		No./Yr.	2	34	870	218	73	39	13	14	10	7
	1971 (N=2247)	Cum. %	-	2	35	47	51	52	53	54	54	
		No./Yr.	2	34	757	271	81	28	18	18	10	
	1972 (N=2305)	Cum. %	-	1	37	50	53	55	55	56		
		No./Yr.	1	20	828	305	72	35	15	13		
	1974 (N=2212)	Cum. %	-	1	33	47	51	52				
		No./Yr.	1	19	709	303	88	33				
	1975 (N=2572)	Cum. %	-	1	35	50	54					
		No./Yr.	1	20	873	394	92					
	1976 (N=2344)	Cum. %	0	1	34	50						
		No./Yr.	0	18	789	369						
	1977 (N=2334)	Cum. %	-	1	36							
		No./Yr.	3	20	823							
Females	1970 (N=2427)	Cum. %	-	3	40	47	48	49	49	49	49	50
		No./Yr.	9	75	893	159	40	15	6	2	2	2
	1971 (N=2405)	Cum. %	-	4	36	44	46	47	47	48	48	
		No./Yr.	9	94	768	186	47	26	11	10	2	
	1972 (N=2417)	Cum. %	-	3	34	42	44	46	46	46		
		No./Yr.	10	73	733	212	48	23	8	14		
	1974 (N=2464)	Cum. %	1	2	34	44	47	48				
		No./Yr.	17	44	782	243	63	32				
	1975 (N=2652)	Cum. %	-	2	34	44	47					
		No./Yr.	7	36	848	286	66					
	1976 (N=2641)	Cum. %	-	2	35	46						
		No./Yr.	13	52	847	307						
	1977 (N=2656)	Cum. %	-	2	36							
		No./Yr.	9	54	885							

[a]Less than .5 percent

TABLE 3

UNDERGRADUATE DEGREE ATTAINMENT FROM INDIANA UNIVERSITY SYSTEM
FOR FALL FRESHMEN CLASSES OF 1970-1977 BY SEX

SEX	Freshman Class (Number)		Years Since Matriculation									
			2	3	4	5	6	7	8	9	10	11
Males	1970 (N=2194)	Cum. %	-[a]	2	43	54	58	61	61	63	63	63
		No./Yr.	2	53	894	238	89	51	18	31	14	1
	1971 (N=2247)	Cum. %	-	2	37	50	54	56	57	58	58	
		No./Yr.	6	35	781	294	92	39	26	19	19	
	1972 (N=2305)	Cum. %	-	1	38	52	56	58	59	60		
		No./Yr.	1	24	846	339	80	43	24	22		
	1974 (N=2212)	Cum. %	-	1	34	48	53	55				
		No./Yr.	1	20	727	324	99	42				
	1975 (N=2572)	Cum. %	-	1	35	51	56					
		No./Yr.	2	21	888	414	106					
	1976 (N=2344)	Cum. %	0	1	36	53						
		No./Yr.	0	20	828	388						
	1977 (N=2334	Cum. %	-	1	37							
		No./Yr.	4	25	837							
Females	1970 (N=2427)	Cum. %	-	4	50	59	62	63	63	64	64	64
		No./Yr.	11	90	1109	223	61	27	15	9	15	5
	1971 (N=2405)	Cum. %	-	2	41	51	54	55	56	56	57	
		No./Yr.	8	28	939	253	61	37	16	16	9	
	1972 (N=2417)	Cum. %	1	5	44	56	59	60	61	62		
		No./Yr.	12	105	942	285	72	36	17	23		
	1974 (N=2464)	Cum. %	1	4	42	55	59	61				
		No./Yr.	19	67	945	324	92	60				
	1975 (N=2652	Cum. %	-	3	40	53	57					
		No./Yr.	9	64	984	358	95					
	1976 (N=2641)	Cum. %	-	3	41	55						
		No./Yr.	14	66	997	383						
	1977 (N=2656)	Cum. %	-	3	41							
		No./Yr.	9	70	1009							

[a]Less than .5 percent

The 1971 Fall class consisted of 2247 males and 2405 females. Less than 40 percent of both males and females were awarded degrees by the Bloomington campus four years after matriculation. Five years after matriculation 47 percent of the males were awarded degrees by IU Bloomington compared to 44 percent of the females. For the IU System, only 37 percent of the male matriculants were awarded degrees four years since matriculation as compared to 41 percent of the females. The gap between males and females for the 1971 freshmen gradually decreased and by 1978 (seven years since matriculation), a higher percentage of males were awarded degrees than females.

In the fall of 1972 there were 2305 males and 2417 females matriculating on the Bloomington campus of IU. At the end of four years 37 percent of the males were awarded degrees by IU Bloomington, but one year later the figure increased to 50 percent. For females these figures were 34 and 42 percent respectively. The order of the male/female percentages was reversed when the IU System was examined. After four years 38 percent of the males had received degrees and increased to 53 percent five years after matriculation. However, in this case the percentages for females were 44 and 56, respectively. Eight years after matriculation 61 percent of the females and 59 percent of the males were awarded degrees by the IU System.

Only about one-third of both the male and female 1974 matriculants were awarded an undergraduate degree by IU Bloomington four years after beginning their undergraduate careers. This increased to 47 percent for males and 44 percent for females when the fifth year after matriculation was included. When the entire system was examined, the increase between the fourth and fifth years after matriculation was at least 13 percent for both males and females.

The largest entering freshman class was in 1975 when 2572 males and 2652 females matriculated on the Bloomington campus. Only 35 percent of the males and 34 percent of the females were awarded degrees by Bloomington after their fourth year of education. These figures increased to 50 and 44 percent in the fifth year after matriculation. An examination of the IU System showed that 51 percent of the males and 53 percent of the females graduated five years after matriculation.

Females in the 1976 freshman class graduated at a slightly higher rate (35 percent) than males (34 percent) from the Bloomington campus, but the five year rate was 50 percent for males and 46 percent for females. The five year system rate was 53 percent for males and 55 percent for females. Data from the most recent matriculating class, 1977, show that 36 percent of males and females graduated from the Bloomington campus within four years. System figures were 37 percent male and 41 percent female.

In summary, on the average 36 percent of the males received degrees from IU Bloomington within four years as compared to 35 percent for the females. The respective five year figures were 49 and 44 percent. There was a 10 to 15 percent increase in the number of males being

awarded degrees from the fourth to fifth year since matriculation. For females this figure was only between 7 and 10 percent. There was no significant difference (χ^2=45.87, df=1, p>.05) between males and females being awarded undergraduate degrees by IU Bloomington four years since matriculation. However, there was a significant difference (χ^2=61.78, df=1, p<.05) between males and females five years after matriculation.

When the entire IU System is included, on the average 32 percent of the males and 43 percent of the females were awarded degrees within four years. The respective five year figures were 51 and 54 percent. Again, a higher percentage of males graduated between the fourth and fifth year. More males than females may be stopping out for one to two semesters or may be taking lighter course loads due to employment conditions.

Results: Graduation Rate by Race

The graduation rate of each freshman class by race (White, Black, Other) is presented in Table 4 for the IU Bloomington campus and Table 5 for the IU System. The precise make-up of the category Other is included in the Appendix. It must be remembered that the number of matriculants is only for the first semester Fall freshmen. The number of minority students admitted during the Fall semester exceeded 300 only in one year and caution must be used in interpreting the statistics from such a relatively small sample.

Of the 4490 white freshmen entering IU Bloomington in the fall of 1972, thirty-eight (38) percent were awarded degrees by the Bloomington campus. This four year figure was 25 percent for the 109 black matriculants and 29 percent for the 123 students in the category Other. After eight years 56 percent of the whites, 39 percent of the blacks and 44 percent of the category Other were awarded degrees by IU Bloomington. The eight year figure for the IU System was 60, 46, and 57 for white, black, and other students respectively.

In 1974 4450 whites, 133 blacks, and 116 other students matriculated at IU Bloomington. The four year graduation rate from IU Bloomington was less than 30 percent only for blacks; the four year IU system rate was 38 percent for whites, 32 percent for blacks, and 33 percent for other. After six years 57 percent of the whites were awarded degrees, 45 percent of the blacks, and 43 percent of other students by the IU System.

While over one-third of both white and other 1975 matriculants graduated within four years from IU Bloomington, only one-fourth of the black matriculants did. Four year graduation rate figures from the IU System were 38 percent, 27 percent, and 39 percent for whites, blacks, and others respectively. The System increase during the fifth year since matriculation was 15 percent for whites, 14 percent for blacks, and 10 percent for others.

TABLE 4

UNDERGRADUATE DEGREE ATTAINMENT FROM THE INDIANA UNIVERSITY'S BLOOMINGTON CAMPUS FOR FALL FRESHMEN 1972-1977
BY RACE AND SEX WITHIN RACE (N=Number of matriculants, %=Cumulative percentage of degrees conferred)

Beginning Semester/Year	Years Since Matriculation	WHITE Male N	WHITE Male %	WHITE Female N	WHITE Female %	WHITE Total N	WHITE Total %	BLACK Male N	BLACK Male %	BLACK Female N	BLACK Female %	BLACK Total N	BLACK Total %	OTHER[1] Male N	OTHER[1] Male %	OTHER[1] Female N	OTHER[1] Female %	OTHER[1] Total N	OTHER[1] Total %
Fall 1972		2200		2290		4490		51		58		109		54		69		123	
	4		38		34		36		16		33		25		20		36		29
	5		51		43		47		24		41		33		39		41		40
	6		54		44		49		27		45		36		41		45		43
	7		56		45		50		29		48		39		43		45		44
	8		56		46		51		29		48		39		43		45		44
	9		57		46		51		31		48		40		46		46		46
Fall 1974		2089		2338		4427		62		71		133		61		55		116	
	4		33		34		34		32		27		29		28		35		31
	5		47		44		46		40		37		38		31		47		39
	6		51		47		49		47		37		41		33		49		41
	7		53		48		50		50		37		43		36		49		42
Fall 1975		2446		2509		4955		68		83		151		61		60		121	
	4		35		34		34		18		30		25		34		38		36
	5		51		45		48		37		37		37		43		48		45
	6		54		47		51		38		37		38		49		50		50
Fall 1976		2224		2525		4749		60		72		132		60		44		104	
	4		35		35		35		13		21		17		23		20		22
	5		51		47		49		30		33		32		33		37		35
Fall 1977		2186		2486		4672		62		82		144		86		88		174	
	4		37		36		3		16		23		20		41		32		36

[1]See Appendix for breakdown.

TABLE 5

UNDERGRADUATE DEGREE ATTAINMENT FROM THE INDIANA UNIVERSITY SYSTEM FOR FALL FRESHMEN 1972-1977 BY RACE AND SEX WITHIN RACE
(N=Number of matriculants, %=Cumulative percentage of degrees conferred)

Beginning Semester/Year	Years Since Matriculation	WHITE Male N	WHITE Male %	WHITE Female N	WHITE Female %	WHITE Total N	WHITE Total %	BLACK Male N	BLACK Male %	BLACK Female N	BLACK Female %	BLACK Total N	BLACK Total %	OTHER[1] Male N	OTHER[1] Male %	OTHER[1] Female N	OTHER[1] Female %	OTHER[1] Total N	OTHER[1] Total %
Fall 1972		2200		2240		4490		51		58		109		54		69		23	
	4		39		44		41		16		34		26		20		52		38
	5		53		56		55		25		45		36		44		58		52
	6		57		59		58		29		48		39		46		62		55
	7		59		60		60		37		53		45		48		64		56
	8		60		61		60		37		53		46		50		64		57
	9		60		62		61		39		53		47		54		65		60
Fall 1974		2031		2338		4427		62		71		133		61		55		116	
	4		34		42		38		34		31		32		28		38		33
	5		49		55		52		42		41		41		31		51		41
	6		54		59		57		50		41		45		33		55		43
	7		55		62		59		55		42		48		36		58		47
Fall 1975		2446		2509		4955		68		83		151		61		60		121	
	4		36		40		38		18		35		27		34		43		39
	5		52		54		53		37		46		41		43		55		49
	6		56		57		57		40		48		44		49		58		54
Fall 1976		2224		2525		4749		60		72		132		60		44		104	
	4		36		42		39		15		22		19		23		23		23
	5		53		56		55		33		38		36		35		41		39
Fall 1977		2186		2486		4672		62		82		144		86		88		174	
	4		38		42		40		16		28		22		42		33		37

[1]See Appendix for breakdown.

Four year graduation rate data for white students in 1975 and 1976 are similar to previous years. Four year Bloomington graduate rate data were 17 percent and 20 percent for blacks and 22 and 36 percent for other students in 1975 and 1976, respectively. For the class of 1976, thirty-two (32) percent of the black students and 35 percent of other students graduated from Bloomington five years after matriculation. These figures compare to 49 percent of the white students.

Averaging all four years together one notes that white students graduated at a faster rate than either of the other two groups. Four years after matriculation 39 percent of the whites, 25 percent of the blacks, and 34 percent of the other students were awarded degrees by the IU System. The increase between the fourth and fifth year since matriculation was about 12 percent for each group from the Bloomington campus and about 14 percent from the System.

Results: Graduation Rate by Sex within Race

Sex within race data are also presented in Tables 4 and 5. The actual number of males and females in each minority group was so small that the success or failure of only a few students could substantially alter the percentages.

Within the white population, females graduated at a faster and higher rate than males from the System in every year shown. For the class of 1972 one finds the four year male figure at 39 percent and female figure at 44 percent; the respective five year rate was 53 percent and 56 percent. Percentages for the 1974 matriculants were 34 percent for males and 42 percent for females after four years. After six years the male and female percentages were 54 and 59, respectively.

Black females graduated at a higher rate from the system than black males for every freshman class except 1974. Less than 20 percent of black male matriculants in 1972, 1975, 1976, and 1977 graduated within four years. Black females were most successful in 1972 (48 percent after eight years) while black males in 1974 were the most successful with 47 percent graduating after six years. In the category Other, females graduated at a higher rate than males in every case except 1976. Except for that year, the female four year figure was always above 32 percent.

On the average, white males graduated faster from the Bloomington campus than white females. This figure was reversed for the IU System. On the other hand, the graduation rate for black and other females was higher than for black and other minority males in every case.

Discussion

The main purpose of this study was to follow up B.E.S.T. Research Report Number 18 by examining the graduation rates of students who matriculated as freshmen on the Bloomington campus of Indiana University. The focus on sex and race information provided an additional dimension to the study of persistence, attrition, and graduation rates.

While the percentage of students completing an undergraduate degree has declined from a high of 40 percent from IU Bloomington for the 1970 freshman class, it appears to be leveling off at about 35 percent. In a similar manner, the IU System peaked at a 46 percent graduation rate for the same 1970 class but has leveled off at about 38 percent during the last four years of the study.

As the four year graduation rate has declined, the graduation rate during the fifth year since matriculation has increased from a low of 8 percent to a high of 13 percent for IU Bloomington, and from 10 to 16 percent for the System. In every case the fifth year increase has been greater for males. For the 1975 male freshman class, an additional 16 percent graduated from the IU System as compared to only 10 percent for the females.

As a group whites graduated at a higher rate than either black or other minority students. While the four year System graduation rate for white students ranged from 38 to 41, it went from 19 to 32 for blacks and 23 to 39 for the category Other. Probably due to smaller numbers, the graduation rate for black and other students has been less stable than the rate for white students.

The comparison of the graduation rate of IU Bloomington students to students attending the main campus of other Big Ten schools provides an additional perspective in viewing the data. Letters were written to each main campus of Big Ten schools requesting information on the graduation rate of recent freshman classes with race and sex data. The following will report on some of the information obtained. Information supplied was not applicable to this study in all cases; in the cases reported not all of the information is directly parallel. For example, in some studies the definition of entering freshmen includes both fall, spring, and summer semesters, transfer students, or is unclear from the material presented. All of these factors may affect the reported graduation rate of an institution. For example, according to Chase, et al. (1976) the persistence rate for students who entered IU during a spring semester was substantially lower than the persistence of students who entered the University in the fall semester. The cut-off date for graduation rates in years in some cases is unclear (spring or summer). Often it is given in terms of semesters.

There has been no attempt to control for varying admission standards or student populations between the schools. When comparing IU Bloomington to other main campuses, it must also be remembered that a group of IU Bloomington students are forced to transfer to regional campus schools due to the nature of their programs, e.g. Allied Health majors.

Information provided by the Office of the Registrar from the University of Iowa (Office of the Registrar - The University of Iowa, March 2, 1981) reported that 47 percent of 3077 new students in 1970 (including freshmen and transfers entering during any semester) had received bachelor's degrees within six years. The respective figure for IU, which included only first semester fall freshmen, was 51 percent. Of the 2524 freshmen who entered Iowa in the fall of 1974, 32 percent had graduated after eight semesters and 48 percent after ten semesters. For the IU Bloomington campus, the four (8 semesters) and five (10 semesters) year figures were 34 and 45 percent, respectively.

An earlier study (McHenry and Langston, 1976) completed at the University of Illinois examined trends in fall freshmen retention, attrition, graduation and ability rates at the Urbana-Champaign campus from 1966 to 1974. This sample was defined as freshmen for whom both ACT:C and high school percentile rank were available. In addition, this study included a breakdown of information by specific college of entry and noted that a major variation in graduation rates exists between different schools. More specifically, of the 5836 fall freshmen in 1970, 54 percent had graduated from Illinois after ten semesters. The five year Bloomington figure for the same class was 49 percent; the System figure was 56 percent.

The Office of Institutional Research at Michigan State University (March 20, 1981) provided persistence-attrition data on first time freshmen in 1973, 1974, and 1975. The information provided in tables dated February 6, 1981, showed that 55 percent of the class of 1974 and 31 percent of the class of 1975 had graduated. This information appears to reflect graduation rate information of five and four years. The corresponding figures for IU Bloomington were 47 percent and 35 percent. Of the 6901 students matriculating at MSU in 1974, four hundred and five (405) were black. As of February 1981, thirty-five (35) percent of the black students had graduated as had 40 percent of other minority students. Respective figures for blacks and other minorities from IU Bloomington were 37 percent and 45 percent. Only 12 percent of 1975 MSU black matriculants had graduated as compared to 17 percent of 1975 black IU matriculants.

Graduation rate information was provided by the University of Michigan (Office of the Rgistrar, April 14, 1981) for matriculating classes in 1974, 1975, and 1976. Slightly more than 45 percent of both the 4238 beginning 1974 fall freshmen and the 4492 beginning 1976 fall freshmen graduated within four years after matriculation. Comparative IU Bloomington figures are 38 percent for both years. The five year figure from the University of Michigan for the 1975 matriculating class was 56 percent, nine percent higher than for the corresponding group of IU matriculants. Ethnic group data showed that 31 percent of the 254 black matriculants in 1976 graduated within four years. The five year figure for the 1976 black freshmen was 32 percent. In both cases this was a higher rate than IU black matriculants.

The above comparisons must be interpreted cautiously and no conclusion can be drawn from the above figures alone that one institution

has a higher success rate than another institution. In addition to there being a lack of congruity between definitions and methodology used in the various studies, a number of factors are not taken into account. The internal academic climate, financial situation of both the students and the university, significant changes in course requirements, and different admission criteria and policies are not referenced in this study.

In some cases, the figures at IU were greater than at other schools; in others they were less. In toto, no school reported a four year graduation rate higher than 50 percent. Evidence from other universities seems to show that an additional 10 to 16 percent of the students graduate during the fifth year after matriculation.

Conclusions and Recommendations

The information in this report suggests a number of important conclusions for the University community. Although the overall graduation rate of matriculants has significantly dropped since 1970, the four year graduation rate appears to be stabilizing during recent years at about 36 percent from the Bloomington campus and 39 percent from the IU System. These figures are much like other institutions of higher learning.

A very modest decrease in the four year graduation figure appeared, but an increasing percentage of matriculants were receiving their degrees during the fifth year since matriculation. The percentage of males receiving degrees during the fifth year since matriculation is higher than females for both the Bloomington campus and IU System. The above suggests an extension of the traditional four year undergraduate experience to five years for over ten percent of recent matriculating classes.

The study shows white students graduating at a faster rate than minority students. For white students, females graduated slightly ahead of males across the IU System, but males graduated ahead of females on the Bloomington campus. The graduation rate of minority females was generally higher than that of minority males in both the Bloomington and system-wide data.

While a number of studies have been conducted on students who have withdrawn from the institution without completing a degree, very few have concentrated on students who successfully complete an undergraduate program at IU. A study of successful students receiving degrees in four years as compared to those receiving degrees in five or more years may shed light on the relationships of students to the University and reasons for the extension of the traditional undergraduate program. In what ways can the University best meet the needs of the different sexes and ethnic groups who exhibit different patters of graduation? Are there significant differences in the graduation rates of students enrolled in different schools within the University? These questions point to the need for further discussion and research on this topic.

For students who begin their careers in higher education at a given university the rate at which they complete the goal of an undergraduate degree is only one measure of the effectiveness of the institution. However, rate may be regarded as a symptom of internal pressures perceived by students, and hence provide a basis for inquiries into the relationships between students and the institution.

Citations

Brigman, S. Leellen and Lucy Cheser Jacobs. Persistence/Attrition: a longitudinal study of the freshman class of 1974. Indiana Studies in Higher Education, 1979, 41, Bureau of Evaluative Studies and Testing.

Brigman, S. Leellen and Charles B. Friedman. Graduation rates of freshmen who entered Indiana University-Bloomington between 1970-74. Research Report, 18, 1980. Bureau of Evaluative Studies and Testing. (Also ERIC ED 187231)

Chase, C. E., Dalton, S. L., Johnson, J. J., and Anastasiow, M. A. Persistence and conditions related to it: a persistent question. Indiana Studies in Prediction, 1976, 32. Bureau of Evaluative Studies and Testing.

College dropout rate at 30 pct. The Chronicle of Higher Education, February 4, 1980, p2.

McHenry, Susan and Ira W. Langston. Recent trends in freshmen retention, attrition, graduation, and ability rates at the Urbana-Champaign campus of the University of Illinois. (Research Memorandum 76-1.) Urbana-Champaign: University Office of School and College Relations, February, 1976.

Office of Institutional Research - Michigan State University. Personal communication, Persistence-Attrition Tables, March 20, 1981.

Office of the Registrar - The University of Iowa. Personal communication, March 2, 1981.

Office of the Registrar Statistical Service - The University of Michigan. Personal communication, Tables: Status of freshman class of 1974, Status of freshman classes 1975-79, April 14, 1981.

A P P E N D I X

Ethnic Make-up of Category OTHER from Table 4 and Table 5

GROUP	Matriculating Class 1972	1974	1975	1976	1977
Alaskan/American Indian	22	9	11	6	5
Asian/Pacific Islander	17	23	21	33	41
Hispanic	14	16	35	21	30
Non-Resident Alien	26	45	42	30	68
Undefined	14	23	12	14	30
Total	123	116	121	104	174